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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,400	07/22/2003	Raymond J. David	TRW(TE)6487	6810

7590 04/26/2005

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CLEVELAND, OH 44114-1400

EXAMINER

DUNN, DAVID R

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 04/26/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,400

Applicant(s)

DAVID ET AL.

Examiner

David Dunn

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) ^{mailed 3/30/05 D.D.} filed on 3/30/05.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-8, 10-15 and 17-23 is/are rejected.
- 7) ☒ Claim(s) 4, 5, 9 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/13/05.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

1. Applicant is advised that the Notice of Allowance mailed February 11, 2005 is vacated. Prosecution on the merits of this application is reopened as various claims are considered unpatentable for the reasons indicated below.

Information Disclosure Statement

2. The information disclosure statement filed January 13, 2005 is acknowledged. See enclosed IDS form.

Claim Objections

3. Claim 2 is objected to because of the following informalities: "is located on with" (two occurrences) is awkward. The examiner recommends deleting "with" in both occurrences. Appropriate correction is required.
4. Claims 3 and 15 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 3 repeats a limitation that was added to claim 1 (i.e., the limitation of claim 3 is recited in claim 1). Similarly, claim 15 includes a limitation that was previously recited in claim 13.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 23 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites the limitations "the wavelength" and "the predetermined range". There is insufficient antecedent basis for this limitation in the claim. It appears that claim 23 should be dependent from claim 22.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1-3, 6, 7, 11, 13-15, 17, 18 and 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Ertl et al. (6,775,606).

Ertl et al. discloses an apparatus for controlling an actuatable occupant protection system in a passenger compartment of a vehicle, the apparatus comprising: a camera (1) configured for obtaining an image of a viewable field within the passenger compartment of the vehicle; at least

one pattern (13; column 4, lines 55-58) located on vehicle structures located within the viewable field; means for detecting (column 5, lines 30-31) the pattern in the obtained image; means (column 5, lines 8-12; column 1, lines 53-55) for removing portions of the obtained image associated with vehicle structures having the pattern so as to obtain information regarding occupancy within the viewable field; and means (column 2, lines 52-56) responsive to the obtained occupancy information for controlling the actuatable occupant protection system.

A first pattern is located on a first vehicle structure (13) and a second pattern (10), different from the first, is located on with a second vehicle structure. The apparatus further includes means for creating an image mask (see column 5, lines 18-22; the gray-scale information of the image is an “image mask” as broadly recited). This image mask is applied to the obtained image (see column 5, lines 22-42). The actuatable occupant protection system includes a variable airbag (see column 2, lines 52-56). The pattern inherently fluoresces when illuminated by light having a wavelength within a predetermined range.

9. Claims 12 and 21 are rejected under 35 U.S.C. 102(e) as being anticipated by Djordjevic (2004/0206904).

Djordjevic discloses an apparatus for controlling an actuatable occupant protection system in a passenger compartment of a vehicle, the apparatus comprising: a dye (see paragraphs 0020-0024; “pigment ... which is highly reflective to near infrared radiation”; a pigment is a dye - “a soluble or insoluble coloring matter”, Merriam Webster’s Collegiate Dictionary, 10th edition) having low near-infrared reflective properties, the dye being associated with vehicle structures located within a viewable field within the passenger compartment of the vehicle; a camer (24) configured for obtaining a near-infrared image of the viewable field; and means (see

first sentence of Abstract) responsive to the near-infrared image for controlling the actuatable occupant protection system.

Djordjevic also shows an illuminator for illuminating the viewable field within the passenger compartment with near-infrared light (26; see paragraph 0018).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 8, 10, 19, 20, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ertl et al. in view of Djordjevic.

Ertl et al. is discussed above and fails to show a dye that is adapted to fluoresce at a near-infrared light.

Djordjevic teaches a dye as discussed above.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Ertl et al. with the teachings of Djordjevic to include a near-infrared dye in order to provide a pattern that would not be visible.

Allowable Subject Matter

12. Claims 4, 5, 9, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

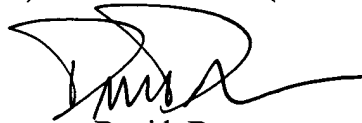
13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Khairallah et al. shows an occupant sensing system of interest. Berenz et al. shows a human presence detection, which subtracts out background interference. Zhang shows an occupant detection system.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Dunn whose telephone number is 703-305-0049. The examiner can normally be reached on Mon-Thur, alt. Fridays, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on 703-308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'David Dunn', with a stylized, flowing script.

David Dunn
Primary Examiner
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